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March 26, 1991 Final

Unit Managers Meeting: Liquid Effluent Retention Facility (LERF) and 200 Area Effluent Treatment/Disposal Facility Federal Building Richland, Washington Meeting Held November 9, 1990

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Appv1. Step allen E	Date: 3/24/9/
Clifford/E. Clark, Unit Manager, Do	OE-RL / / /
Appv1. Paul Starch	Date: 3/26/9/
Paul Stasch, Unit Manager, Ecology	
Appvl	Date: 3/26/91
Dale McKenney, Contractor Represen	tative, WHC / /
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ADMINISTRATIVE RECORD (Liquid Effluent Retention Facility <u>and</u> 200 Area Effluent Treatment/Disposal Facility) [Care of Susan Wray, WHC (H4-22)]

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## MEETING MINUTES

subject: Liquid Effluent Retention Facility and 200 Area Effluent Treatment/Disposal Facility Unit Manager's Meeting

To: Distribution  FROM: J. E. Thrasher CHAIRMAN:			BUILDING: Federal Building		
			J. E. Thrasher		
Area	Shift	Meeting Date	Number Attending		
242-A Evaporator and Effluent 3000 Treatment Program		November 9, 1990	25		
	•••	Area Shift	CHAIRMAN: J. E. Thrasher  Area Shift Meeting Date		

See attached list

## **PURPOSE:**

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Present the technical background information for the planned 200 Area Effluent Treatment Facility to Ecology and the EPA. Status action items from the October 4, 1990 242-A Evaporator and PUREX Process Condensate Treatment Facility Regulatory Permitting meeting. Discuss the Liquid Effluent Retention Facility (LERF) cover, pumps, sampling ports, and fill method designs. Discuss other environmental regulatory and permitting concerns for the LERF and the 200 Area Effluent Treatment Facility, as time may permit.

## DISCUSSION:

The topics of discussion are listed on the attached proposed agenda.

The 200 Area Effluent Treatment Facility technical background information was presented as follows:

<u>Presenter</u>	Topic
Don Flyckt	Introduction
Joel Eacker	242-A Evaporator
Francis Jungfleisch	Characterization Data
Fred McDonald	Treatment Alternatives Considered
Al Crane	Preferred Treatment System
Phil Olson	Testing Program

Ecology personnel asked questions and received answers as the above presentations were given.

The 242-A Evaporator Part B Permit application is due to be submitted to Ecology in June 1991. The evaporator has ammonia and radionuclide monitoring in the stack and will have at least periodic monitoring for organics.

The characterization data for the effluent streams planned to be feeds to the effluent treatment facility is based primarily on data that was obtained before the treatment facility project began. And, the evaporator has not been operating since April 1989. At this stage, the treatment facility design has to use information available. The effluent treatment final design may not yield a treated effluent

that meets the most restrictive limiting values from the primary Drinking Water Standards, Secondary Drinking Water Standards, Proposed Drinking Water Standard, Proposed Ground Water Quality Enforcement Limits, and Land Disposal Restrictions. If the Best Available Technology does not result in treated effluent that meets these limits, then an alternative a point of compliance will have to be negotiated. If a constituent exceeds an applicable regulatory limit and Ecology does not buy-in to the BAT/AKART, then WHC/DOE-RL will have a problem.

While the treatment facility conceptual design has definitely taken secondary waste generation into consideration, the secondary waste treatment has not been determined, yet.

The presentation on the Preferred Treatment System was given without any viewgraph slides or handout material, as the material is procurement sensitive. The design contract has not been put out for bid and WHC has to be careful with technical information that could inadvertently provide a bidder with an advantage. The effluent treatment conceptual P&ID diagrams were the only visual reference provided, being placed open on the conference table.

When asked what level of detail would be required for the WAC-240 engineering report for the effluent treatment facility, Paul Stasch indicated he did not know. Gary Anderson of Ecology did not come to this meeting. This is a question he apparently will have to answer. Paul did say that 80% design would be required for RCRA permitting.

The effluent treatment presentations and discussion were completed by approximately 12:10 p.m. The meeting broke for lunch and reconvened at 1:00 p.m. As the afternoon session began, Paul Stasch indicated that he, Hap Rantala, and Bob King were pleased with the technical presentations on the effluent treatment and glad to see a lot of options had been considered in an attempt to find the most effective treatment technologies.

The status of the October 4, 1990 Effluent Treatment/Disposal Action Items were reported as follows:

Separate Effluent Treatment Facility Part A? Ecology Response.

Paul Stasch requested that WHC/DOE submit detailed, written rationale for separating the effluent treatment facility RCRA Permit application from the LERF RCRA Permit applications. He said he understands our reasons but the written rationale is required for formal Ecology consideration. A date for submitting the written rationale is to be determined. Action: J. D. Williams, WHC

o NOI referenced plume maps for Effluent Treatment. WHC response.

A copy of "Operational Groundwater Monitoring at the Hanford Site - 1988," December 1989 was given to Paul Stasch to satisfy this action item.

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o SEPA determination. Ecology response.

Paul Stasch stated that Ecology will not process a 216 Permit application or work towards permitting on the soil column disposal facility until they receive a written acceptance of the State Of Washington 216 Permit authority from DOE. Further, Paul stated that Ecology will not issue a SEPA determination on the effluent treatment/ disposal facility until the 216 issue is resolved.

The WHC/DOE representatives stated that this position was detrimental to the project and could be a very significant schedule impact if not resolved soon. The issue is out of the WHC and DOE-RL hands with a ruling by the U.S. Department of Justice (DOJ) being awaited. It is understood a draft ruling has been written but is awaiting DOJ administrative review and approval before it can be released. This process apparently could take another few months. Dale McKenney stated the project can not stop work on the disposal site selection and characterization without seriously impacting the project completion schedule which in turn will impact other Hanford environmental clean-up activities.

o Preliminary Site Evaluation Report comments by Ecology:

Paul Stasch stated that Ecology will not spend time reviewing and commenting on the Preliminary Disposal Site Evaluation Report until the 216 Permit issue is resolved. Paul said that we should have obtained Ecology's agreement on the site selection criteria first. A criteria document should have been submitted without any selected sites. Rick Oldham requested WHC/DOE and Ecology discussions on the criteria. Paul Stasch reiterated that Ecology will not discuss this until the 216 Permit issue is resolved. He added that discharge to the river or zero discharge are alternatives.

o Plume maps for candidate disposal sites. WHC response.

A copy of "Hanford Site Groundwater Surveillance for 1989" June 1990, was handed to Paul Stasch to satisfy this action item. An Ecology hydrologist did not attend the meeting as had been hoped by WHC. Thus, there was no discussion of these plume maps or the potential impact of the various plumes on the disposal site selection.

o Acceptance of BAT guidance documents for AKART by Ecology.

Paul Stasch reported that the letter has been written but is awaiting signature.

Proposed effluent discharge values by Ecology.

A draft table "Liquid Effluent Current Comparative Limits, October 16, 1990" was giving to WHC/DOE in this meeting satisfying this action item. It was agreed that WHC/DOE would review this table and provide comments at the next meeting. A copy of this table is attached to these minutes.

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It was commented that we cannot depart from Land Disposal Restriction limits from EPA potable water standards. The purge water and groundwater standards are flexible. Rick Oldham asked how Ecology was going to impose LDR limits since the waste streams to be treated contain only F listed waste. Paul Stasch responded that WHC/DOE would need to prove that constituents that are not F listed wastes did not come from a listed waste source.

Paul Stasch added that the EPA comments on the Liquid Waste Stream Specific Reports would be available next month. The Ecology comments would be ready in February at the earliest. He specifically commented that the stream characterizations were well done in most cases.

The status of the October 4, 1990 LERF Action Items were reported as follows:

Letter re: Standardization of Liner/Covers at Hanford by Ecology.

The letter by Ecology still has to be sent. The as-built drawings and lessons learned reports for the LERF construction will be available for other Hanford projects on the completion of the LERF project.

o ECN procedures to include Ecology review/comments. WHC response.

At this time, the WHC/DOE procedure for LERF requires WHC clearance and submitted to DOE-RL, who in turn will then forward to Ecology. With this procedure Ecology gets a copy of the ECN only after it has been approved. Paul Stasch stated that Ecology needs to have a quick notification of possible changes and the opportunity to comment on the potential permitting/regulatory impacts of the changes. It was agreed that WHC will define the process and time-frames for getting ECNs to Ecology. This process should be consistent for all projects. Gerry Becker undertook to complete this by November 15, 1990.

o CQA documentation. WHC response.

The requested CQA documentation is in the WHC clearance process at this time. Gerry Becker will get the clearance completed and submit the documentation to DOE-RL for issuance to Ecology.

o Deer damage control by WHC.

The planned fence to surround the LERF basins is presently being constructed. It will be 8 feet high including the barbed wire. The drawings will be submitted to Ecology upon clearance.

Cover performance/air quality plan by WHC.

The cover performance criteria is in the cover contract specification. There is no air quality plan per se for the LERF. However, WHC/DOE submitted documentation to Washington State Department of Health with copies to Ecology, EPA and Benton County substantiating that an Air Permit was not required.

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A copy of letter #9001137, "Air Emissions - Liquid Effluent Retention Facility," DOE-RL to Washington Department of Health, March 14, 1990 was given to Paul Stasch. This letter documented that operating the LERF will not result in increased radionuclide emissions and concluded that no further documentation pursuant to the Clean Air Act is required.

The rational in writing for the cover performance/air quality planning was requested by Paul Stasch. WHC/DOE committed to provide a data for the submittal of this rationale to Ecology at the next meeting.

o Dangerous Waste Management plans by WHC.

WHC has assumed that these "plans" are meant to be the waste analysis, the inspection, the contingency/emergency, and the training plans that are chapters in the LERF Part B Permit application. That is correct but Ecology stated that these chapters need to be stand-alone documents that can be submitted and reviewed by Ecology before LERF operation begins. Paul Stasch committed to establish timing requirements for the submittal of these document to pass on to WHC/DOE in the next meeting.

Contact list by WHC.

The WHC/DOE LERF and Effluent Treatment/Disposal projects contact list was handed to Ecology in this meeting.

Paul Stasch requested that he be cc:mailed on letters being sent to Ecology via Tim Nord. Don Kelley asked that Paul copy Dale McKenney on all LERF and Effluent Treatment/Disposal correspondence addressed to DOE-RL.

Soil/Bentonite test beds by WHC.

A specific soil/bentonite test plan has not been put together. The test beds will be prepared and tested per the EPA Guidance Manual. Paul Stasch asked that a formal presentation of the test plan be prepared and given to Ecology. This will be done at the next meeting.

A LERF construction drawing review meeting was held in the Kaiser Engineers-Hanford Richland office on October 18, 1990. Ecology representatives had raised several questions about the LERF design for which they want answers. These were discussed in this meeting as follows:

o LERF cover venting (emissions) calculations.

These should be a part of the cover performance/air quality rational requested by Ecology earlier in the meeting.

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o LERF pumps.

Ecology questioned the rationale for the number of pumps, the pump resistance to the chemical constituents that will be in the effluents stored in the LERF basins, if there are back-ups, if torque may be a problem, whether the installation approach proven, and the basis for the seven-day evacuation time.

It was pointed out that the pump(s) for pumping to the Effluent Treatment Facility has not been designed yet.

o LERF sampling ports.

Ecology stated that they need the rationale for the number of LERF sampling ports, the quality of the samples to be obtained, the sampling procedure, sampling port design, and the basis for the sampling port locations.

LERF filling method.

Ecology does not agree with the LERF design for filling the basins from the upper sides. They feel the fill should be from the bottom to minimize vaporization of the effluent volatiles. They need the rationale for the present fill design.

There were no new items tabled for discussion in the meeting.

Commitments/Action Items agreed to by representatives of Ecology, DOE-RL, and WHC at the end of this meeting are itemized on the attached sheets.

The next meeting will be held December 12, 1990 in the WHC office in Richland, WA.

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